for lessening the labor involved have been devised, some of which are to be highly commended.

" A comparatively inexpensive arrangement for inflating larvae is a modification of that described in the ' Entomologische Nachrichten' (1879, vol v, p. 7), devised by Mr. Fritz A. Wachtel (Fig. 61). It consists of a foot-bellows such as is used by chemists in the laboratory, or, better still, of a small cylinder such as is used for holding gas in operating the oxyhydrogen lamp of a sciopticon. In the latter case the compressed air should not

FIG. 62.—Tip of inflating-tube with armature for holding larval skin.

exceed- ing twenty pounds to the square inch, and the cock regulating the flow from the cylinder should be capable of very fine adjustment. By means of a rubber tube the air is conveyed from the cylinder to a couple of flasks, one of which contains concentrated sulphuric acid, and the other is intended for the reception of any overflow of the hydrated sulphuric acid which may occur. The object of passing the air through sulphuric acid is to rob it, so far as possible, of its moisture. It is then conveyed into a flask, which is heated upon a sand-bath, and thence by a piece of flexible tubing to a tip mounted on a joint allowing vertical and horizontal motion and secured by a standard to the working-table. The flow of air through the tip is regulated by a cock. Upon the tip is fastened a small rubber tube, into the free extremity of which is inserted a fine glass tube. This is provided with an armature consisting of two steel springs fastened upon opposite sides, and their ends bent at right angles in such a way as to hold the larval skin firmly to the extremity of the tube. The skin having been adjusted upon the fine point of the tube, the bellows is put into operation, and

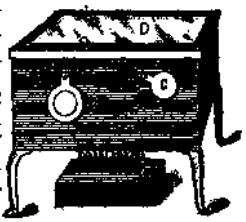

FIG. 63.—Drying-oven

B, door pin to hold door open; D, door

the skin is inflated. A drying apparatus is provided in several ways. A copper plate mounted upon four legs, and heated by an alcohol-lamp placed below, has been advocated by some. A better arrangement, used by the writer, consists of a small oven heated by the flame of an alcohol-lamp or by jets of natural gas, and pro-